

## HERNIA IN THE LINEA ALBA.<sup>1</sup>

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G. W. K., male; white; married; aged forty-two years; book-keeper; good family history. Between the years 1887 and 1893, while located in McCook, Neb., I was several times called upon to treat this man for gastritis, which I then believed to be entirely due to alcoholism. He averred that the attacks sometimes occurred when he had drunk nothing for several months, but, for reasons at the time deemed sufficient, these statements were received with caution. The apparent certainty of the diagnosis led me to take measures for symptomatic relief without making that thorough methodical examination which ought always to be made in such cases.

His attacks were so nearly alike that a description of one may be considered typical of all. He would be taken to his home suffering with very intense gastric pain, vomiting, great nervousness, and cardiac depression, and usually with a temperature two to three degrees above normal. The ingestion of a teaspoonful of water would increase his suffering and provoke vomiting. I never succeeded in giving him the slightest relief except by the hypodermatic use of morphine.

These attacks, as a rule, lasted from three days to one week, when the symptoms disappeared as if by magic, and the attending physician was forced to the private opinion that the prompt convalescence was in spite of, rather than because of, his ministrations. These attacks usually, if not always, followed closely upon the heels of a debauch.

In the summer of 1893 I left for Europe, and all knowledge of his condition was lost sight of. He now informs me that he passed under the hands of several physicians, his attacks of pain growing more frequent, and his inebriations becoming more constant, until in May, 1894, he took the "Keeley cure." As is often the case, this

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treatment neither cured his habit nor stopped his gastric pain, and his condition has been growing more and more pitiable.

In June, 1894, he removed to Omaha, and Dr. C. C. Allison, of this city, has had him in charge through two or three severe attacks. So many of the exacerbations of gastric pain were dissociated with alcoholism, and in view of the fact that the patient was having some joint rheumatism, one attendant was led to seriously consider the possibility of the existence of rheumatism of the muscular fibres of the stomach. When this idea was advanced, I confess to having to an extent shared the suspicion. With this exception, I think, all the physicians who had seen him considered the case to be a simple gastritis of alcoholic origin, occurring in a patient of exceptional nervousness and irritability.

January 2, 1895, the patient presented himself at my office, and stated that he had become convinced that he had cancer of the stomach, and wished me to examine him. He was directed to lie upon my office-chair, and my attention was at once attracted to a small, cyst-like body, not larger than a butter-bean, situated under the skin in the linea alba about one and a half inches below the xiphoid appendage. When I spoke of it he remarked that it did not amount to anything, that it had been there many years, and that doctors had told him that it was a small cyst. But I found, by careful examination, that pressure decreased its size, and that there was a distinct impulse and increase in size when he coughed. By careful manipulation it disappeared and a dimpling remained, suggesting that traction was being made from within the abdomen. The diagnosis was at once made of hernia in the linea alba with an adherent band of omentum within the sac, the other end of this band being attached to the greater curvature of the stomach. He was told that this was the probable cause of his severe and trying gastric symptoms.

Two days later Dr. Allison saw the case with me and concurred fully in the diagnosis, and united with me in advising an early operation. The patient gladly consented to the operation, saying that anything was preferable to his present condition. He had in the last few months been emaciating rapidly, having become only a shadow of his former self.

Accordingly, January 5, 1895, at Immanuel Hospital, he was subjected to an operation for the radical cure of the hernia. I was ably assisted by Dr. Allison. We felt much solicitude about his bearing the anaesthetic well, but were happily disappointed. An

incision about three inches long was made in the linea alba in such a manner that the hernial protrusion would be near the middle. The sac was separated from its surroundings and opened. It was found filled with adherent omentum. Tracing this inward, it was found to continue in the form of a band to the greater curvature of the stomach not far from the pylorus. This band was pulled forward, tied with catgut, and cut off. But the ligature had not been tied securely and slipped. There being no haemorrhage, no effort was made to reapply the ligature.

Next the sac, with adherent omentum, was drawn as far out as possible and transfixated with a double silk thread, which was tied each way. The sac was then cut off near the ligature. The deep fascia was then united by means of a few interrupted catgut sutures. The sheaths of the recti muscles were now opened to insure firm union, and closely placed silkworm-gut sutures introduced through skin, superficial fascia, and recti muscles to the deep fascia.

The patient's temperature before the operation was 99.6° F., and rose once afterwards to 100° F. The convalescence was a normal one, and from the time of the operation there was complete absence of the old pain. He complained a few times of pain in the region of the wound, but this complaint was evidently due to a desire for morphine, for which he had acquired a habit.

The first change of dressings was made on the tenth day, and the wound found perfectly healed and the stitches removed. The gastric pain is apparently completely cured, and at the time of writing this report the patient is at work in a more comfortable condition than he has been for many years.

The dearth of literature upon the foregoing subject is deemed sufficient reason for relating this case at length. The leading American text-books upon surgery either do not mention it at all or dismiss it with a line. Careful search through a large number of American surgical works has failed to discover a word to indicate the severe gastric symptoms which a slight hernia in the linea alba may cause. This lack of literature upon the subject seems to me a sufficient apology for those of us who attended this case without making a correct diagnosis. Several careful men had had the case in charge.

Bergmann, of Berlin, stated in a clinical lecture last winter

that he has found more than a dozen cases in which the best specialists of Berlin and Paris had diagnosticated gastritis, ulcer, or cancer of the stomach, and had persistently employed lavage, rigid diet, and the other most approved modes of treatment without relief. Hernia in the linea alba had then been discovered, an operation done, and relief followed in every case. Koenig, in the last edition of his text-book of surgery, draws a vivid picture of the symptoms produced by the trouble which simply accentuates the experience of Bergmann and the present case. He says, "The characteristic ruptures which evoke suffering in the stomach regularly have—we speak at least from our own experiences—either a small mass of omentum in the sac, so that it cannot slip back on account of the narrow neck, or a strip of omentum has become adherent in the sac and, perhaps, also to the border of the neck. In the cases in which we could follow it, this band passed to the greater curvature of the stomach, so that when the stomach was moved the band of omentum was dragged upon, and only by the complete severing of this band could the symptoms be relieved."

The picture is very distinct. The hernial sac is almost invariably small, so small that it is not likely to be noticed unless search is made for it. The strand of adherent omentum is an almost constant accompaniment. The traction upon the greater curvature of the stomach produces most distress immediately after the ingestion of a meal, or when the stomach is filled with gas. This fact gives additional evidence of gastritis, ulcer, or cancer. As any one will agree, after a perusal of this case, the complexus of symptoms produced by this little trouble is entirely out of proportion to the anatomical changes. That severe, often repeated, or constant epigastric pain does not necessarily indicate a pathological condition within the stomach, but may be entirely extrinsic, a study of the case just reported will prove. If this contribution is so fortunate as to impress upon the profession the need for greater care in the examination of patients suffering from pain in the gastric region, its object will have been accomplished.